



Silage

SYSTEMS FOR PROCESSING FISHING WASTE, SILAGE AND COMPLETE DOSAGE
EQUIPMENT FOR PRODUCTION AND STORAGE

xylem

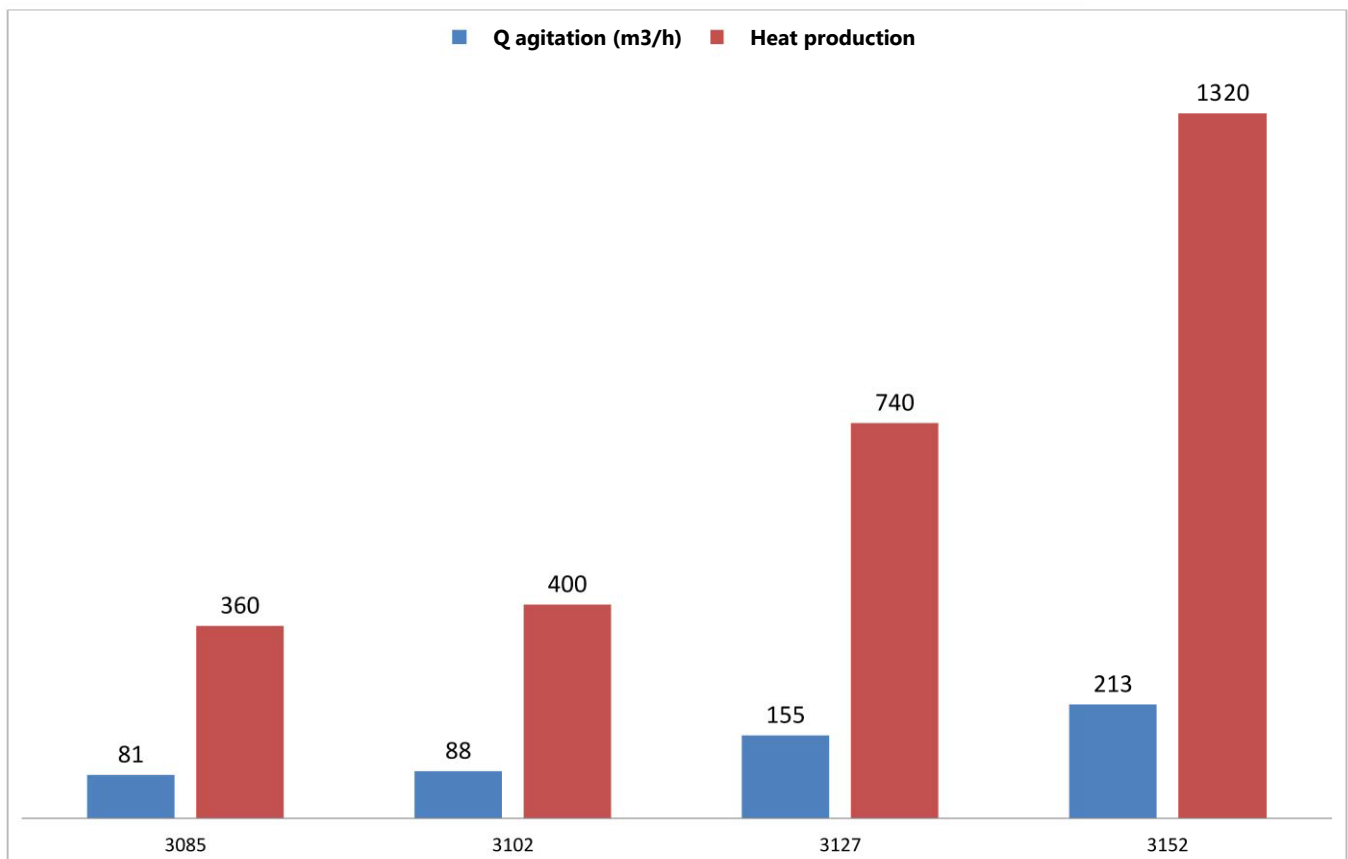
Flygt submersible chopper pumps

Flygt submersible chopper pumps have been used for silage production since the late 70s.

Pump size	Fish size
F-3085LT 2.0 kW	0/-200g
F-3085LT 3.1 kW	50/-2000g
F-3085LT 5.9 kW	Ord. fish
F-3085LT 13.5 kW	Fish and fry



For silaging of fishing waste, it is very important to have the correct temperature. To start autolysis and decomposition of the waste, the temperature must be between +5 °C and +40 °C. The higher the temperature is within this range, the faster the process is. In other words, the temperature is critical for the production capacity.



The diagram shows the pump's capacity when operating in a standard Xylem grinder pump tank and the energy released into the silage in the form of heat.



By using submersible pumps, all energy production will be used in the silage production. The added heat increases the production capacity and enables production in winter and in colder climates.

Dry-installed chopper pumps

Today, Xylem delivers solutions with dry-installed chopper pumps. The benefit of dry-installed pumps is that the silage is only in contact with the inside of the pump housing and is therefore easier to access for service and maintenance. By using dry-installed pumps, you do not transfer any notable excess heat from the motor to the silage. This solution is generally only used when the surrounding temperature is stable and for indoor installation.



Production tank in AISI316 with dry-installed pump



Production tank in PE with dry-installed pump for fully automatic continuous production



Flygt FZ-3153 13.5kW, chopper pump for dry installation

KPT 7 PE

Production tank with manual agitator/drain valve

Volume: 700 litres
Material: PEHD
Connection: DN100
n: PN10/16 2"
Drainage:

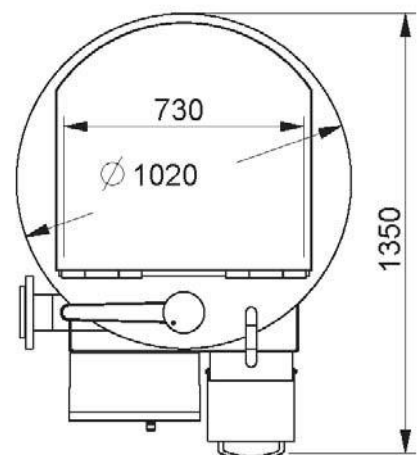
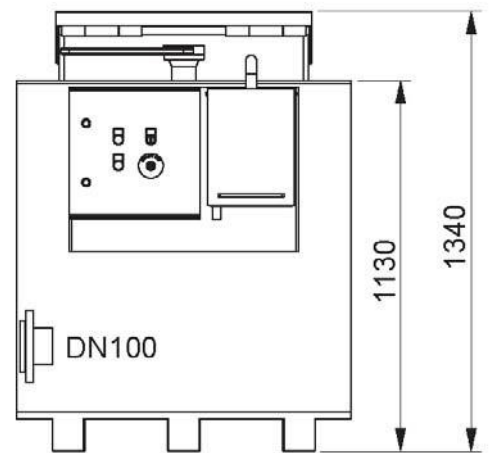
Fits pumps	Fish size
F-3085LT 2,0 kW	0-200 g
F-3085LT 3.1 kW	50-2000 g (with blade)



The tank can be delivered complete with installed chopper pump, automatics and acid metering.



The metering pump is mounted in its own enclosed casing – optimising safety for the operator!



KPT 8 PE

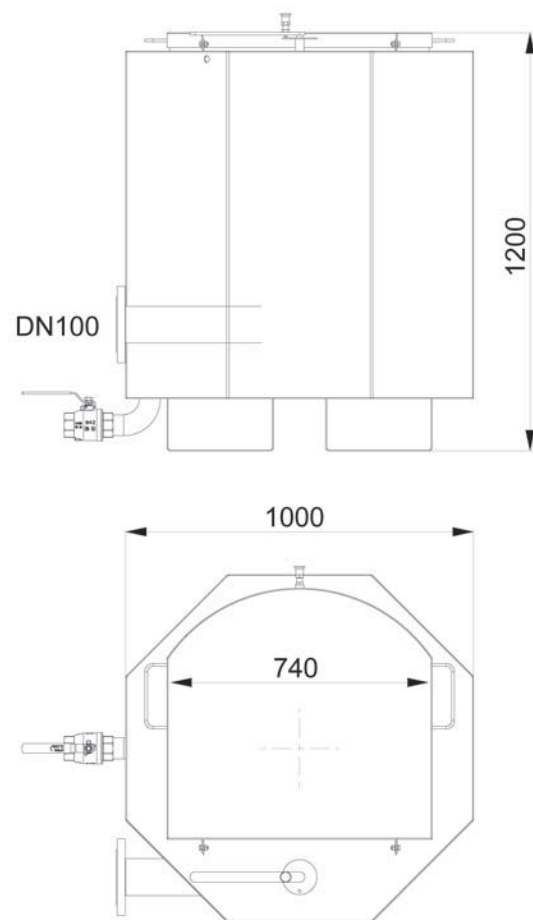
Production tank with manual agitator/drain valve

Volume: 800 litres
 Material: AISI316 - 3 mm DN100
 Connection: PN10/16
 Drainage: 2" Ball valves

Fits pumps	Fish size
F-3085LT 2.0kW	0-200g
F-3085LT 3.1kW	50-2000g (with blade)
F-3085LT 5.9kW	Ord. fish



The tank can be delivered complete with installed chopper pump, automatics and acid metering.



The metering pump is mounted in its own enclosed casing – optimising safety for the operator!

KPT 17/22/28 SS

Production tank with manual agitator/drain valve

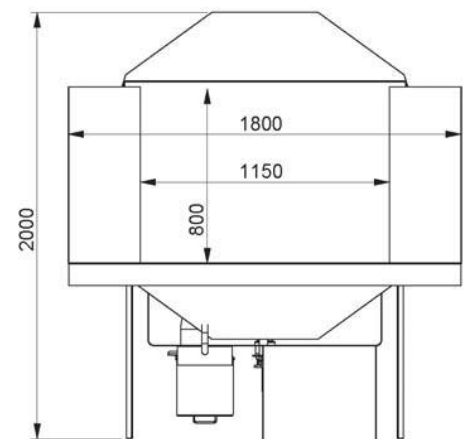
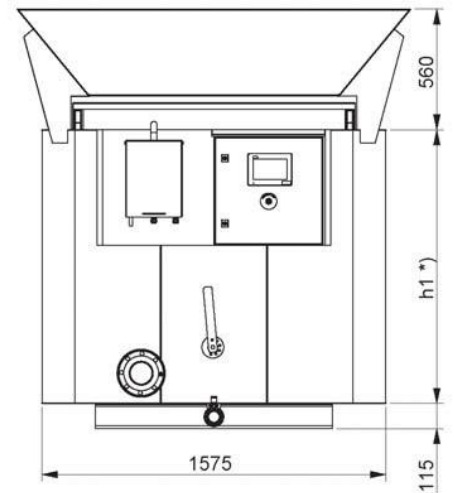
Material: AISI316 - 3 mm
 Connection: DN100 PN10/16
 Drainage: 2" Ball valves

Fits pumps	Fish size
F-3085LT 2.0 kW	0-200g
F-3085LT 3.1 kW	50-2000g (with blade)
F-3085LT 5.9 kW	Ord. fish
F-3085LT 13.5 kW	Fish and fry



The tanks come with a single sliding door or with a hopper and sliding door on rollers.

The tank can be delivered complete with installed chopper pump, automatics and acid metering.



The metering pump is mounted in its own enclosed casing – optimising safety for the operator!

Tank size	Volume	Height *) h1
KPT 17 SS	1700	1000 mm
KPT 22 SS	2200	1250 mm
KPT 28 SS	2800	1500 mm

KPT 17 GRP

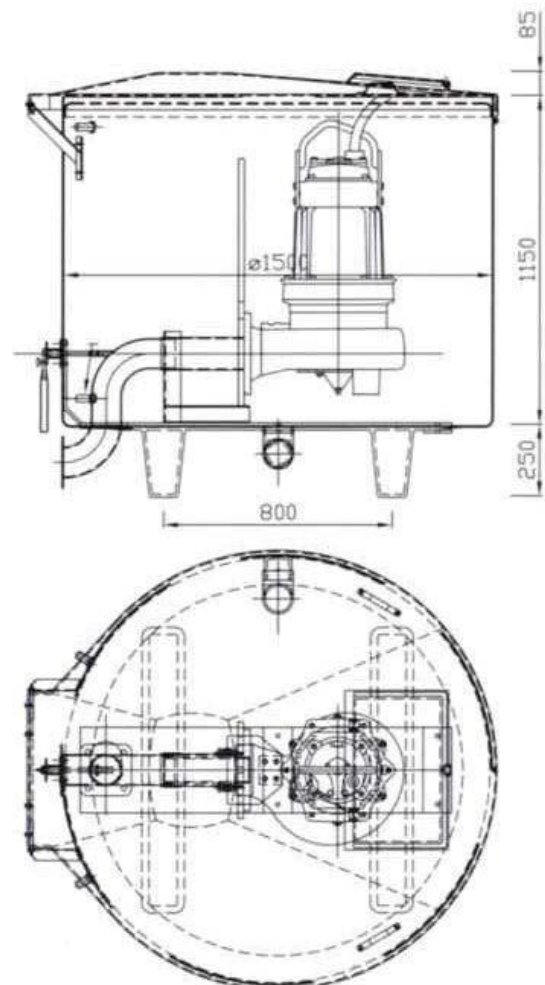
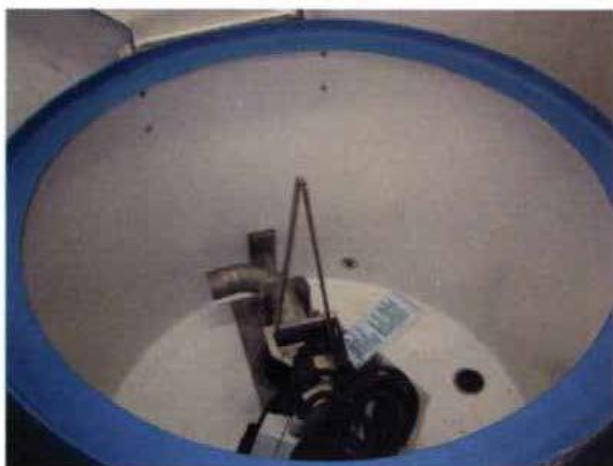
Production tank with manual agitator/drain valve

Volume: 1700 litre
Material: GRP
Connection: DN100 PN10/16
Drainage: 2"

Fits pumps	Fish size
F-3085LT 2.0 kW	0-200g
F-3085LT 3.1 kW	50-2000g (with blade)
F-3085LT 5.9 kW	Ord. fish
F-3085LT 13.5 kW	Large fish



The tank comes with a large hinged door and a small inspection hatch.



KPT 50 PE

Production tank with manual agitator/drain valve

Volume: 5000 litre AISI316 - 3 mm
 Material: DN100 PN10/16
 Connection: 2" Ball valves
 Drainage:

Fits pumps	Fish size
F-3085LT 2.0 kW	0-200g
F-3085LT 3.1 kW	50-2000g (with blade)
F-3085LT 5.9 kW	Ord. fish
F-3085LT 13.5 kW	Large fish

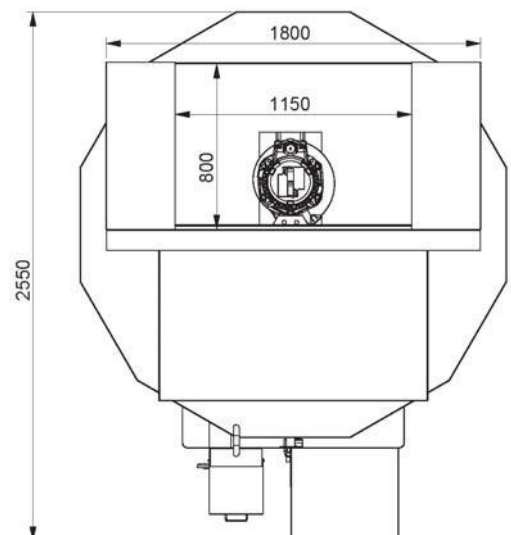
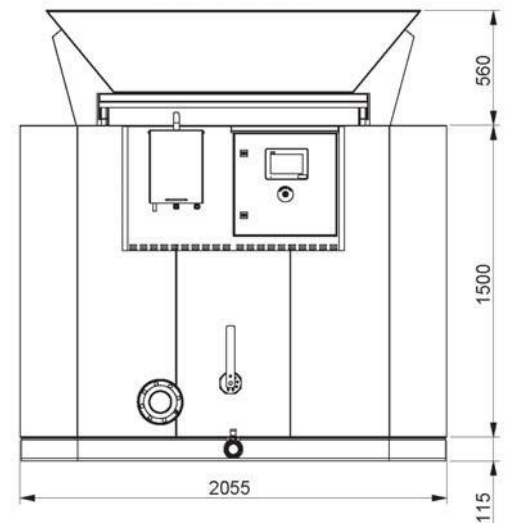


The tank comes with sliding door or with hopper and sliding door on rollers.

The tank can be delivered complete with installed chopper pump, automatics and acid metering.



The metering pump is mounted in its own enclosed casing – optimising safety for the operator!

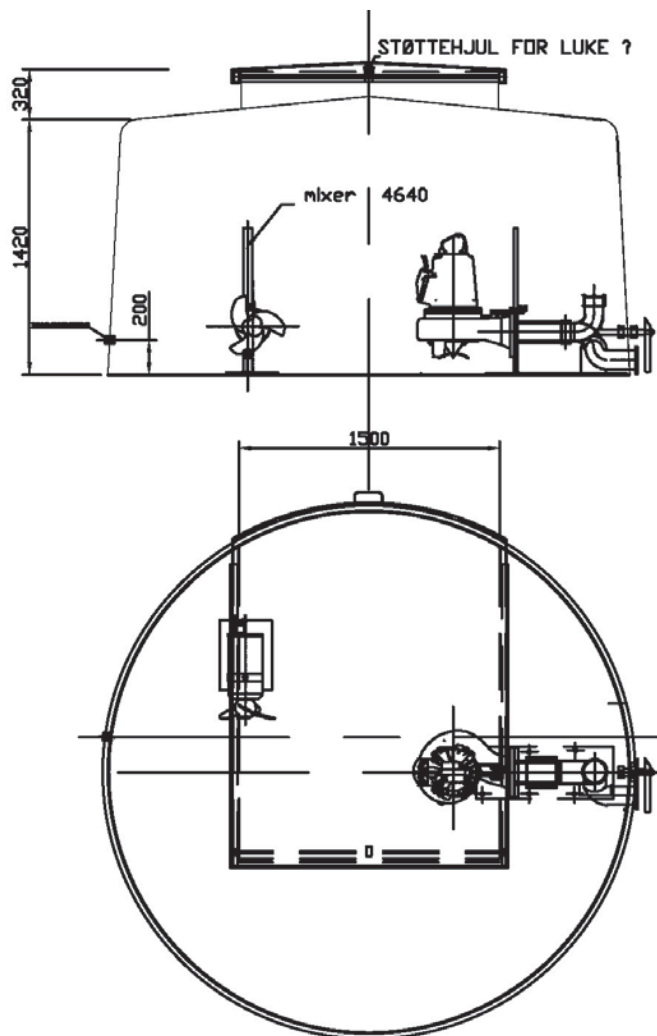


KPT 100 GRP

Production tank with manual agitator/drain valve

Volume: 10,000 litre
Material: GRP
Connection: DN100 PN10/16
Drainage: 2"

Fits pumps	Fish size
F-3085LT 2.0 kW	0-200g
F-3085LT 3.1 kW	50-2000g (with blade)
F-3085LT 5.9 kW	Ord. fish
F-3085LT 13.5 kW	Large fish



The tank can be used as a combined storage and production tank. Available optionally with chopper pump and mixer for better agitation.

Complete system

Together with our standardised production tanks, Xylem delivers complete customer-tailored systems including production tank, storage tank, valves, instrumentation and automatics.



Xylem delivers storage tanks in all sizes and materials. Contact us and tell us what you are looking for.



For agitation in the storage tanks, Flygt 4600 compact mixer is used in AISI316L, mounted on guide pipes.

Eccentric screw pumps

Flygt eccentric screw pumps are used to transport fish waste and finished silage.



The eccentric screw pumps are available with and without an auger. Pumps with augers are used for high viscosity media, such as fish intestines, bones etc.



Fingerling unit

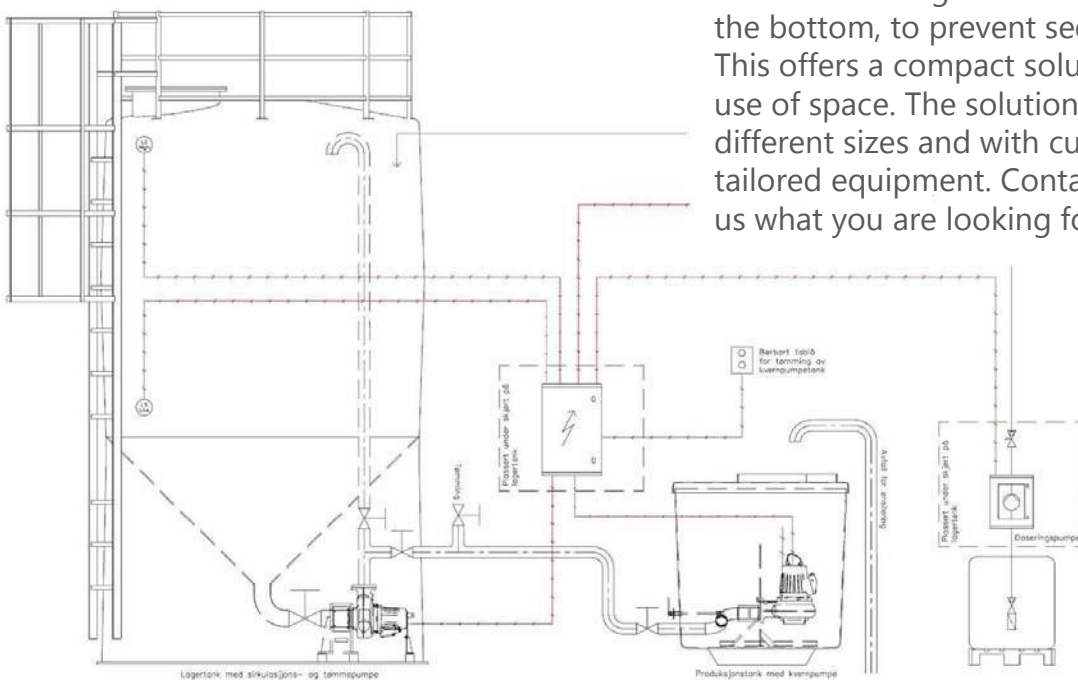
Smaller silaging plants with pumping from storage to production tank.

A chopper pump in a production tank can also be used for agitation in the storage tank and drainage of the storage tank to vehicle or boat. The same principle can also be used by larger plants.



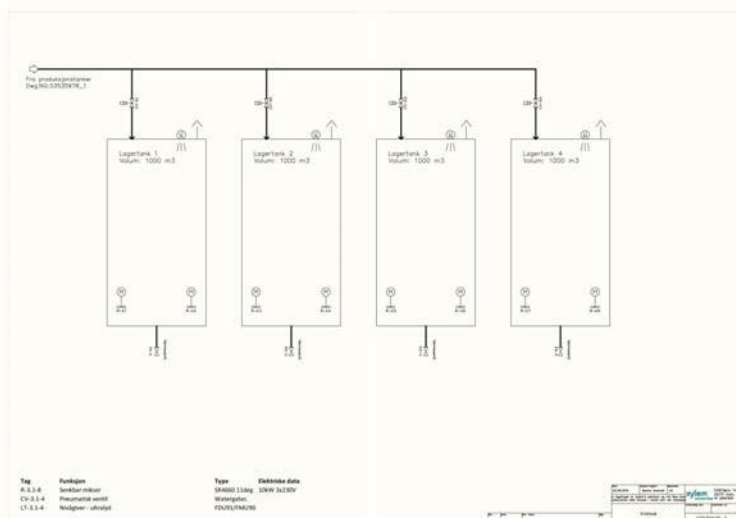
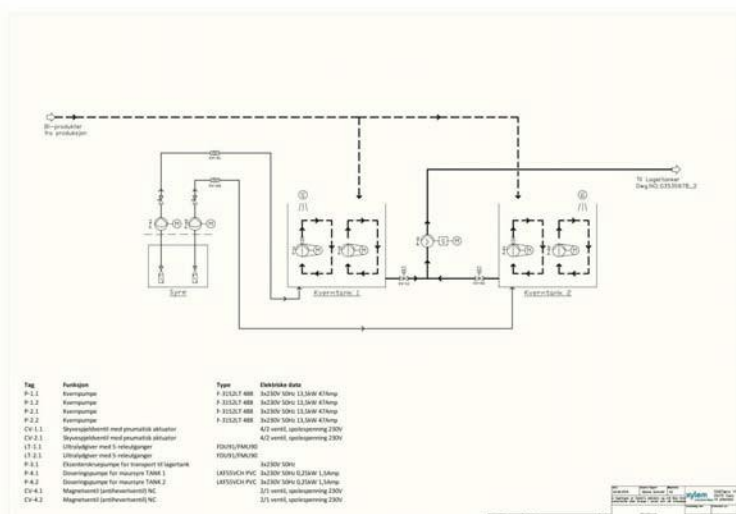
Ålesund model

Automatics, valves and circulation/drain pump are placed in a dry machine room under the storage tank. The tank is conical at the bottom, to prevent sedimentation. This offers a compact solution and good use of space. The solution is available in different sizes and with customer-tailored equipment. Contact us and tell us what you are looking for.



Continuous production

Xylem provides complete fully automatic solutions for continuous production of silage, including storage tanks.



The systems for continuous production normally consist of several production tanks with submersible or dry-installed chopper pumps.

Tank size and number of chopper pumps in each tank is adapted to the unit's capacity. The unit comes mounted with level sensors, automatic acid metering and automatic valves.

Flygt eccentric screw pumps are used for transporting finished silage to one or more storage tanks.

The unit is operated via a touch screen and can be remotely operated via PC or telephone.

pH control with WTW IQ SensorNet



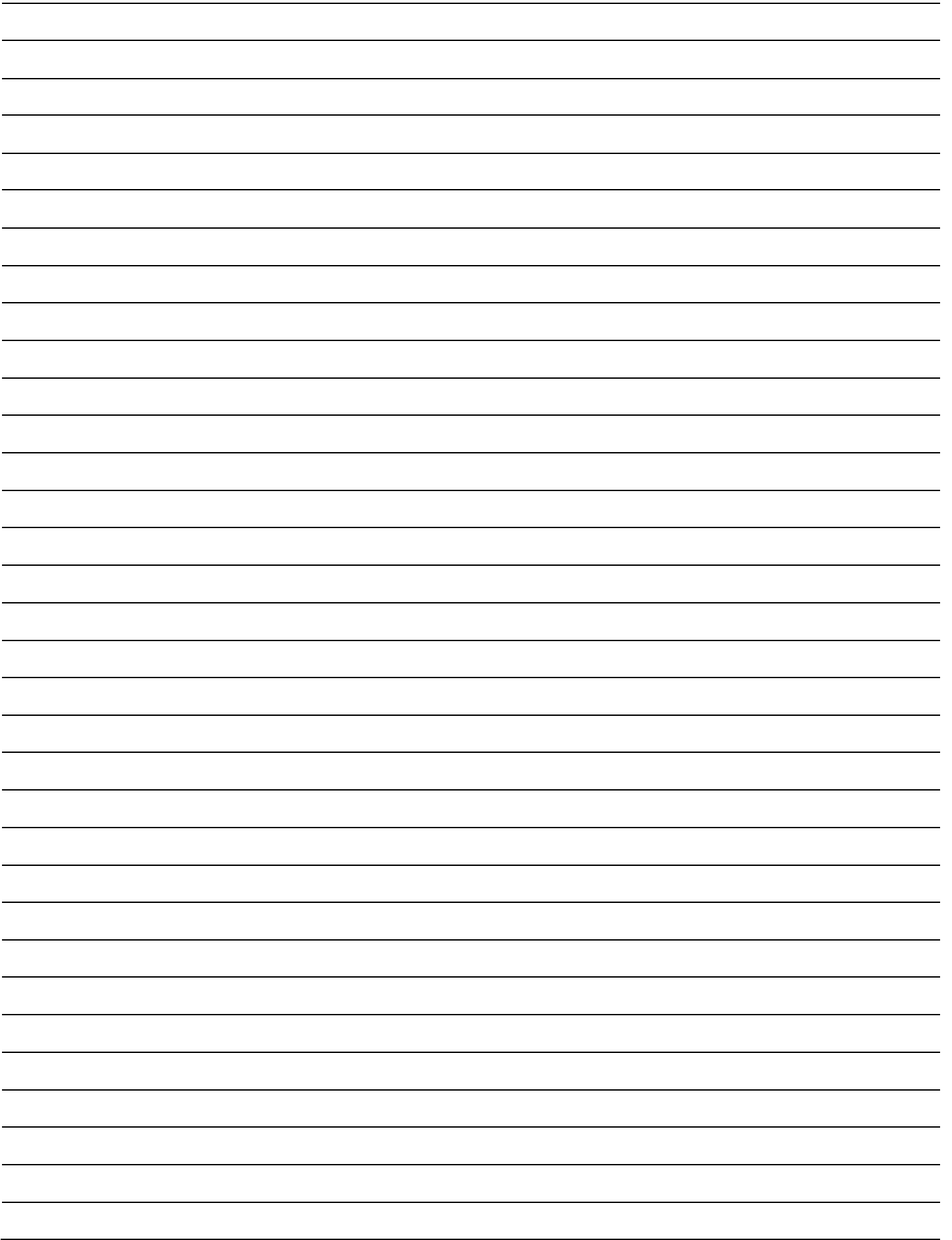
WTW GmbH is a leading manufacturer of measuring instruments and part of the Xylem Group. With IQ SensorNet, you can monitor and log pH levels in your silage unit. The system allows for up to 20 measuring points in the same system. Flexible connection to PC or SCADA monitoring system.

Hand-held pH meter



A pH sensor can be mounted in a sliding fixture with a rinse opening for installation in either a pipe or the side of the tank. Ensures fast and effective cleaning of electrode and minimises grime during maintenance.

Xylem also provides hand-held pH meters. These come in a practical case with all the necessary accessories.



Xylem Service around the globe

Geographic proximity is important for maintaining problem-free operation. Particularly in aquaculture and the fishing industry, the quick resolution of operating problems can be critical. It is never too far to a Xylem branch, with staff standing by for service, replacement pumps or parts.

Xylem has approx. 16,000 employees in 150 countries. We have 130 employees in 9 branch offices in Norway and approx. 85 employees in 4 branches in Denmark. We have service workshops at each office in Norway and at 3 of the offices in Denmark, and in total, the service department counts approx. 50 individuals in Norway and 40 in Denmark.



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